118US

PRIOR ART

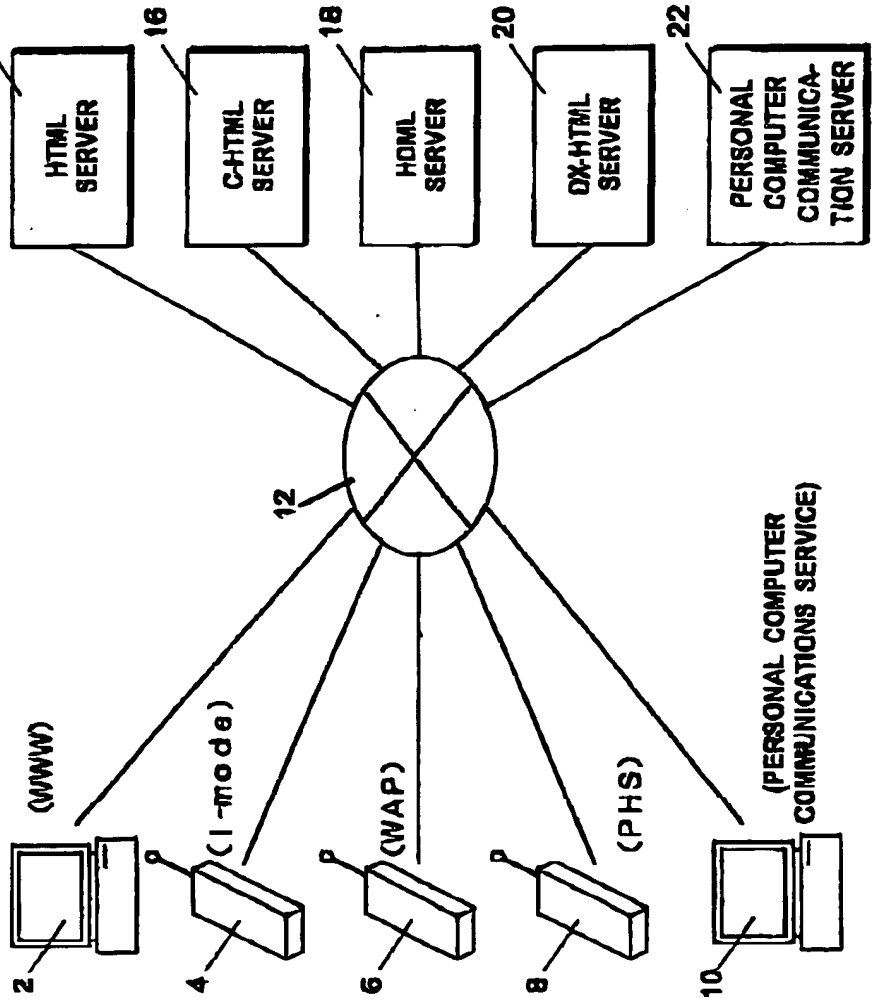


FIG.1

T-800 P.42/70 F-483 Mar-30-01 08:43am From-

118US

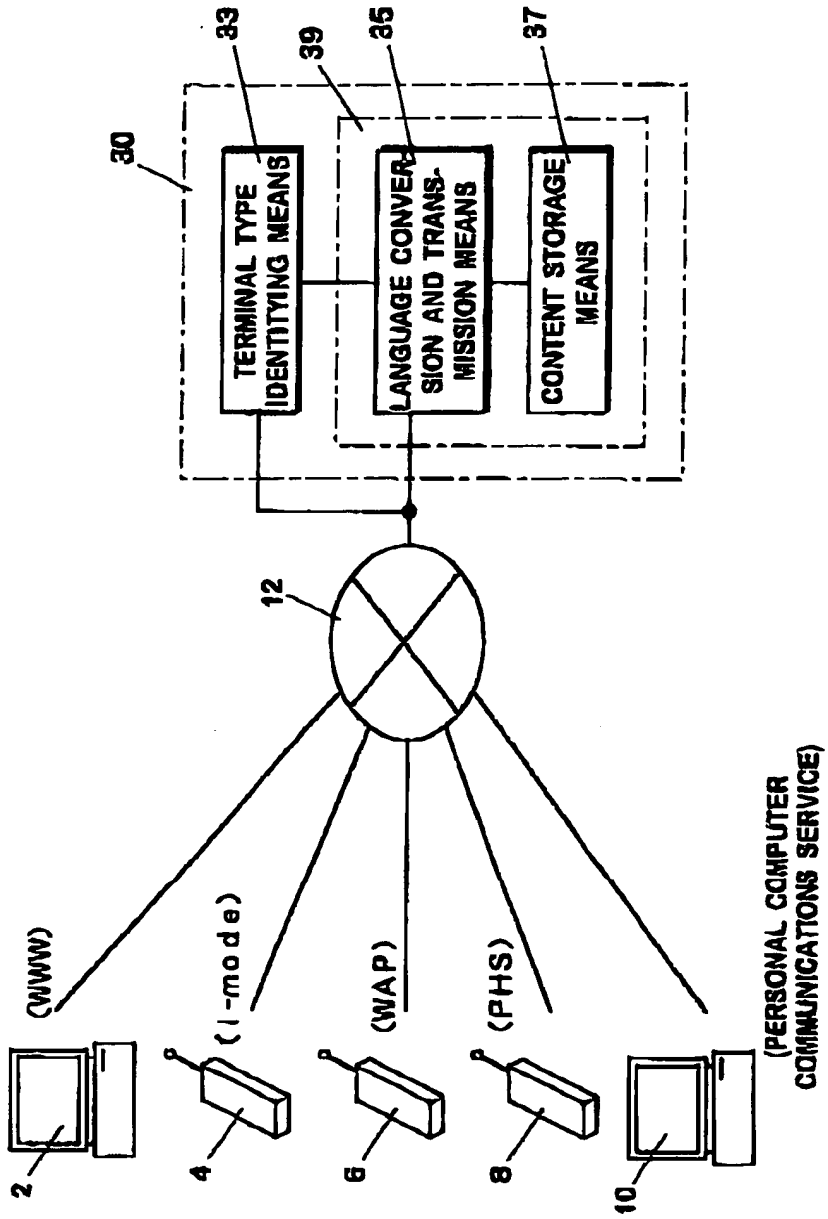

30
33
39
35
37
TERMINAL TYPE IDENTITYING MEANS
LANGUAGE CONVERSION AND TRANSMISSION MEANS
CONTENT STORAGE MEANS
12
(WWW)
(i-mode)
(WAP)
(PHS)
(PERSONAL COMPUTER COMMUNICATIONS SERVICE)
2
4
6
8
10

FIG.2a

118US

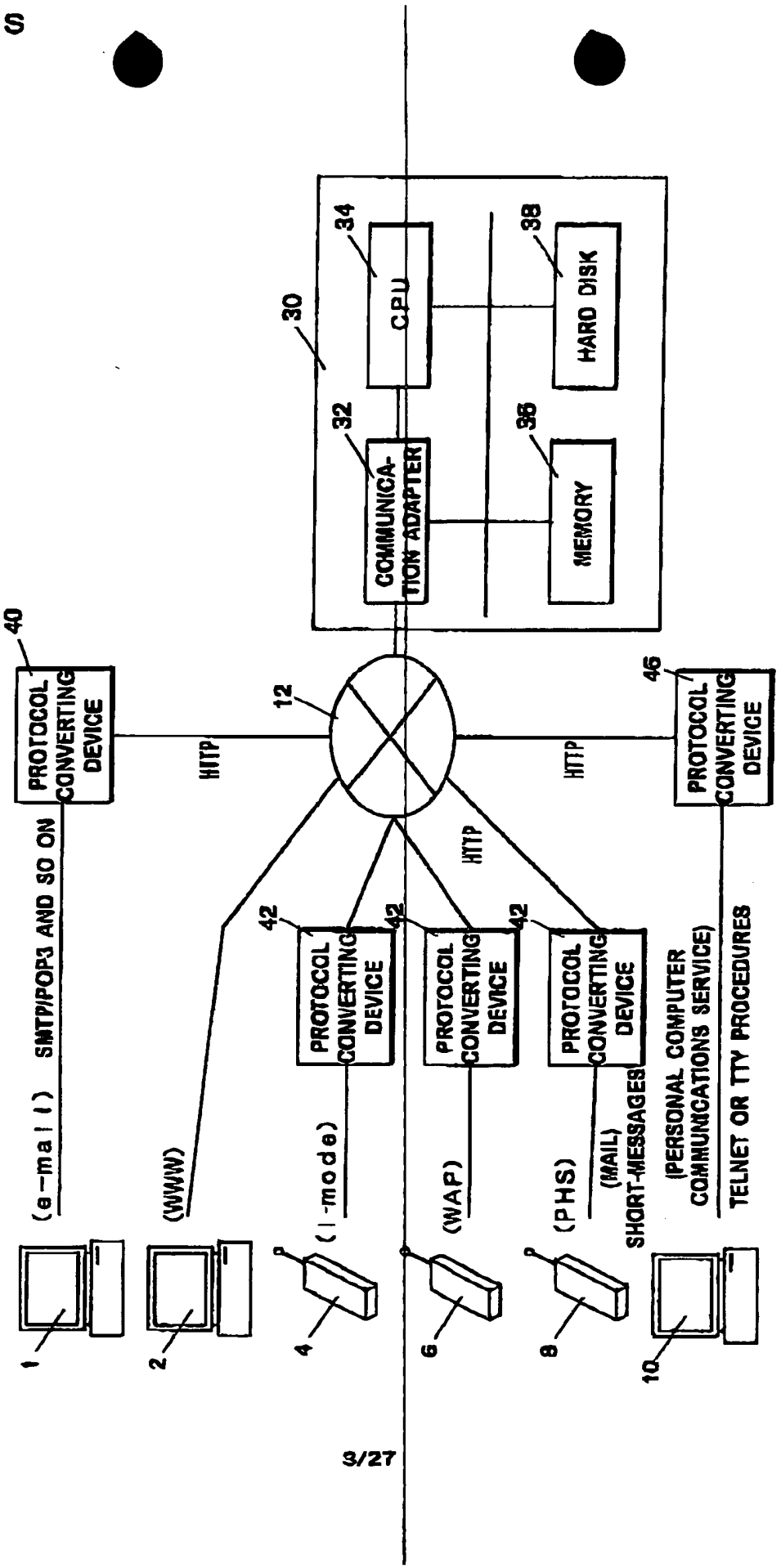
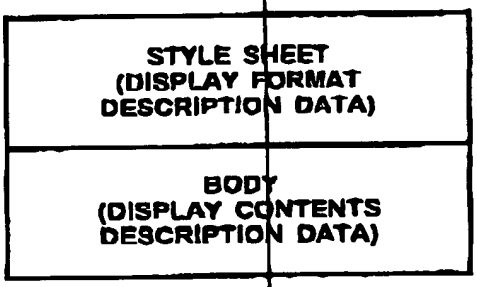

30
34
CPU
38
HARD DISK
32
COMMUNICATION ADAPTER
36
MEMORY
12
40
PROTOCOL CONVERTING DEVICE
46
PROTOCOL CONVERTING DEVICE
HTTP
HTTP
HTTP
42
PROTOCOL CONVERTING DEVICE
42
PROTOCOL CONVERTING DEVICE
42
PROTOCOL CONVERTING DEVICE
(e-mail) SMTP/POP3 AND SO ON
(WWW)
(i-mode)
(WAP)
(PHS) (MAIL) SHORT-MESSAGES
(PERSONAL COMPUTER COMMUNICATIONS SERVICE) TELNET OR TTY PROCEDURES
1
2
4
6
8
10

FIG.2b

118US

FIG.3

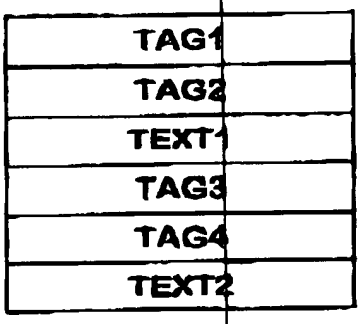
DATA STRUCTURE OF DATA WRITTEN IN BASIC LANGUAGE



E905250 052504 2 B2

118US

FIG.4



Mar-30-01 08:43am From- T-800 P.46/70 F-483

20052201 0552201

<TAG NAME ATTRIBUTE NAME=ATTRIBUTE VALUE ATTRIBUTE NAME=ATTRIBUTE VALUE...>

FIG.5

118US

FIG.6

BODY

```
<KSP KEY=K1 NAME="KSP SAMPLE">
<P KEY=R1> SELECT THE MENU</P>
<IMG KEY=R2 SRC=ICOM.JPG>
<A KEY=R3 HREF=MAIL.KSP> E-MAIL</A>
<A KEY=R4 HREF=BBS.KSP> BBS</A>
</KSP>
```

118US

STYLE SHEET

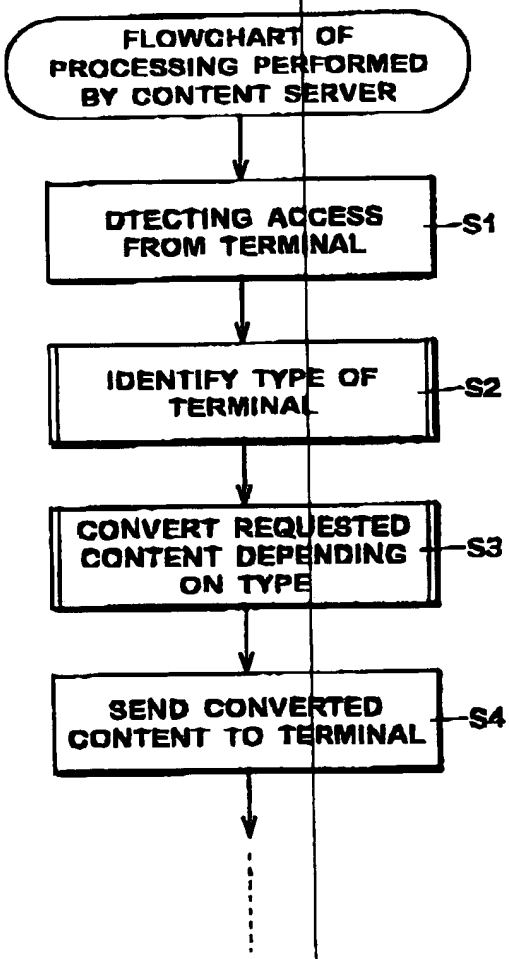
```
<HTML>
<HEAD><TITLE>$K1.NAME$</TITLE></HEAD>
<BODY BACKGROUND=bg.gif>
$R1$<BR>
<IMG SRC=$R2.SRC$>
<A HREF=$R3.HREF$>$R3</A>
<A HREF=$R4.HREF$>$R4</A>
</BODY>
</HTML>
```

FIG.7

Mar-30-01 08:44am From- T-800 P.49/70 F-483

118US

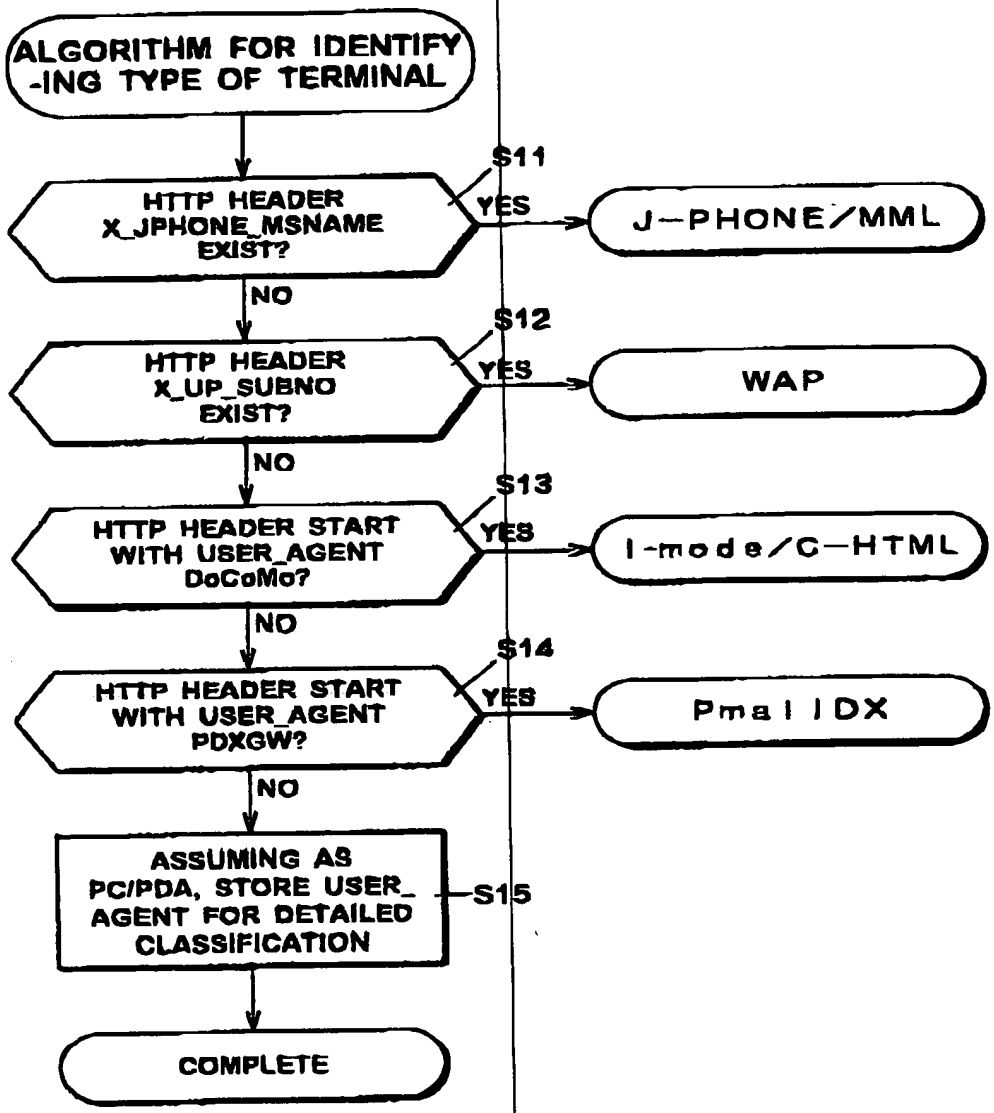
FIG.8



T-800 P.50/70 F-483 Mar-30-01 08:44am From-

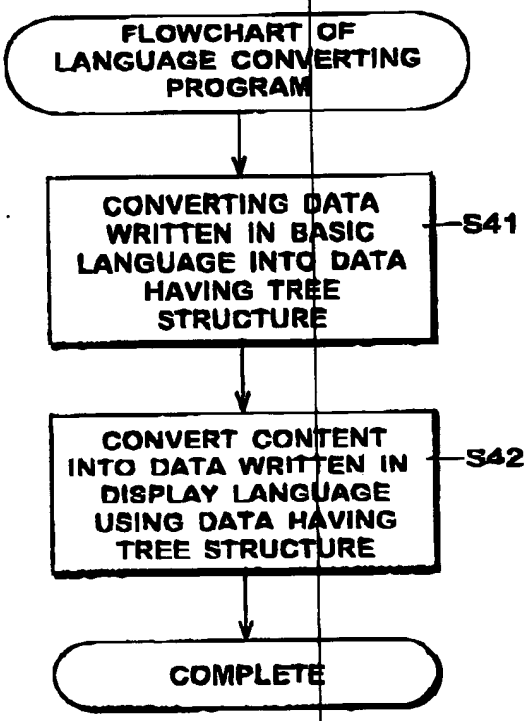
118US

FIG.9


ALGORITHM FOR IDENTIFY -ING TYPE OF TERMINAL
HTTP HEADER X_JPHONE_MSNAME EXIST?
S11
YES
J-PHONE/MML
NO
HTTP HEADER X_UP_SUBNO EXIST?
S12
YES
WAP
NO
HTTP HEADER START WITH USER_AGENT DoCoMo?
S13
YES
I-mode/C-HTML
NO
HTTP HEADER START WITH USER_AGENT PDXGW?
S14
YES
PmaIIDX
NO
ASSUMING AS PC/PDA, STORE USER_ AGENT FOR DETAILED CLASSIFICATION
S15
COMPLETE

118US

FIG.10



+2002-03-30+10:52+SUGW-PITTMAN+ 03

118US

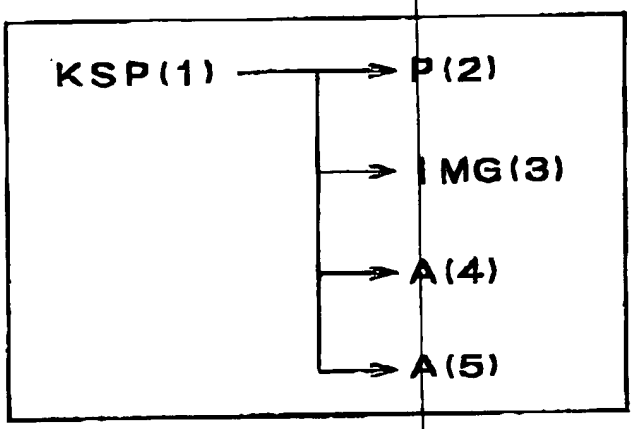
FIG.11

TAG NUMBER	
TAG TYPE	
NUMBER OF ATTRIBUTES	
ATTRIBUTE NAME-1	ATTRIBUTE VALUE-1
ATTRIBUTE NAME-2	ATTRIBUTE VALUE-2
ATTRIBUTE NAME-3	ATTRIBUTE VALUE-3
. . .	. . .
TEXT (ONLY A-TAG, P-TAG)	
SUBSEQUENT TAG NUMBER	
TAG NUMBER FOR CHILD TAG(ONLY KSP,FORM,SELECT TAG)	

+0055045150859

118US

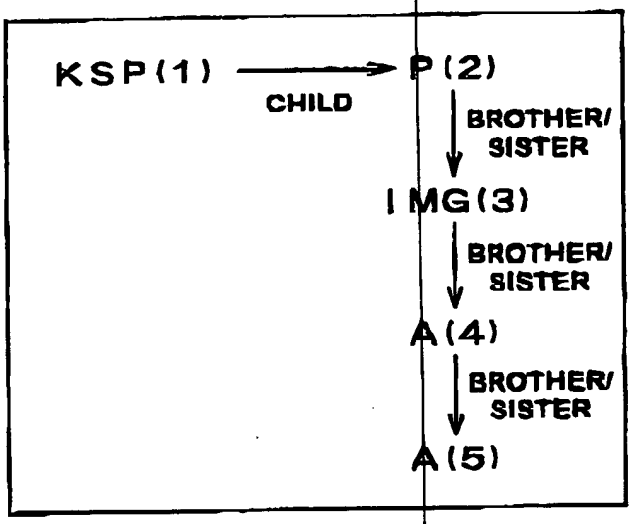
FIG.12



EP0856239A2 I

118US

FIG.13



T-800 P.55/70 F-483 From- Mar-30-01 08:44am

118US

FIG.14

TAG NUMBER	1
TAG TYPE	KSP
NUMBER OF ATTRIBUTES	2
ATTRIBUTE NAME-1	KEY
ATTRIBUTE VALUE-1	K1
ATTRIBUTE NAME-2	NAME
ATTRIBUTE VALUE-2	KSPSAMPLE
TEXT	(EMPTY)
SUBSEQUENT TAG NUMBER	0(NO CORRESPONDING TAG)
TAG NUMBER FOR CHILD TAG	2

TAG NUMBER	2
TAG TYPE	P
NUMBER OF ATTRIBUTES	1
ATTRIBUTE NAME-1	KEY
ATTRIBUTE VALUE-1	R1
TEXT	SELECT THE MENU
SUBSEQUENT TAG NUMBER	3
TAG NUMBER FOR CHILD TAG	0(NO CORRESPONDING TAG)

TAG NUMBER	3
TAG TYPE	IMG
NUMBER OF ATTRIBUTES	2
ATTRIBUTE NAME-1	KEY
ATTRIBUTE VALUE-1	R2
ATTRIBUTE NAME-2	SRC
ATTRIBUTE VALUE-2	ICON. JPG
TEXT	(NONE)
SUBSEQUENT TAG NUMBER	4
TAG NUMBER FOR CHILD TAG	0(NO CORRESPONDING TAG)

TAG NUMBER	4
TAG TYPE	A
NUMBER OF ATTRIBUTES	2
ATTRIBUTE NAME-1	KEY
ATTRIBUTE VALUE-1	R3
ATTRIBUTE NAME-2	HREF
ATTRIBUTE VALUE-2	MAIL. KSP
TEXT	MAIL
SUBSEQUENT TAG NUMBER	5
TAG NUMBER FOR CHILD TAG	0(NO CORRESPONDING TAG)

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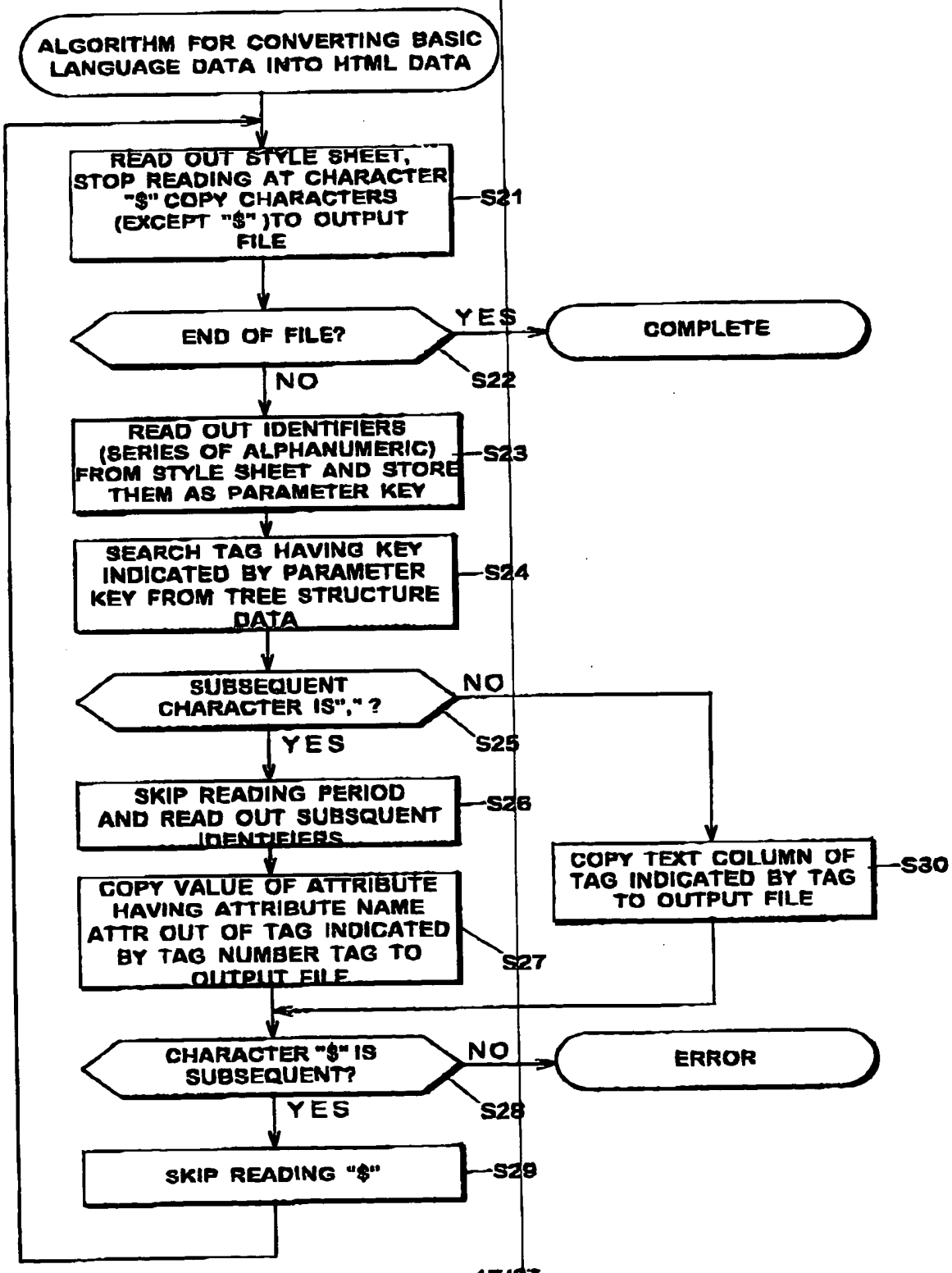
FIG.15

TAG NUMBER	5
TAG TYPE	A
NUMBER OF ATTRIBUTES	2
ATTRIBUTE NAME-1	KEY
ATTRIBUTE VALUE-1	R4
ATTRIBUTE NAME-2	HREF
ATTRIBUTE VALUE-2	BBS. KSP
TEXT	BBS
SUBSEQUENT TAG NUMBER	0(NO CORRESPONDING TAG)
TAG NUMBER FOR CHILD TAG	0(NO CORRESPONDING TAG)

118US

FIG.16


ALGORITHM FOR CONVERTING BASIC LANGUAGE DATA INTO HTML DATA
READ OUT STYLE SHEET, STOP READING AT CHARACTER "$" COPY CHARACTERS (EXCEPT "$")TO OUTPUT FILE
S21
END OF FILE?
YES
COMPLETE
S22
NO
READ OUT IDENTIFIERS (SERIES OF ALPHANUMERIC) FROM STYLE SHEET AND STORE THEM AS PARAMETER KEY
S23
SEARCH TAG HAVING KEY INDICATED BY PARAMETER KEY FROM TREE STRUCTURE DATA
S24
SUBSEQUENT CHARACTER IS"," ?
NO
S25
YES
SKIP READING PERIOD AND READ OUT SUBSQUENT IDENTIFIERS
S26
COPY TEXT COLUMN OF TAG INDICATED BY TAG TO OUTPUT FILE
S30
COPY VALUE OF ATTRIBUTE HAVING ATTRIBUTE NAME ATTR OUT OF TAG INDICATED BY TAG NUMBER TAG TO OUTPUT FILE
S27
CHARACTER "$" IS SUBSEQUENT?
NO
ERROR
S28
YES
SKIP READING "$"
S29

118US

```
<HTML>
<HEAD><TITLE>KSP SAMPLE</TITLE></HEAD>
<BODY BACKGROUND=bg.gif>
SELECT THE MENU <BR>
<IMG SRC=ICOM.JPG>
<A HREF=MAIL.KSP> MAIL </A>
<A HREF=BBS.KSP> BBS </A>
</BODY>
</HTML>
```

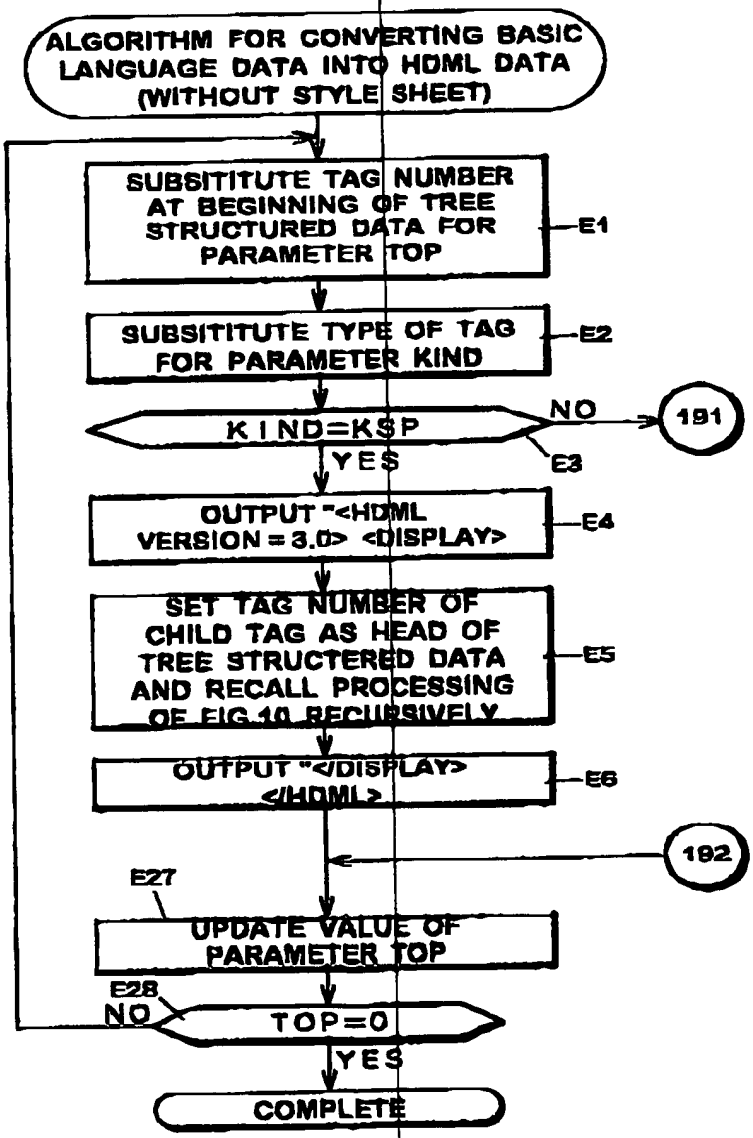
FIG.17

118US

FIG.18

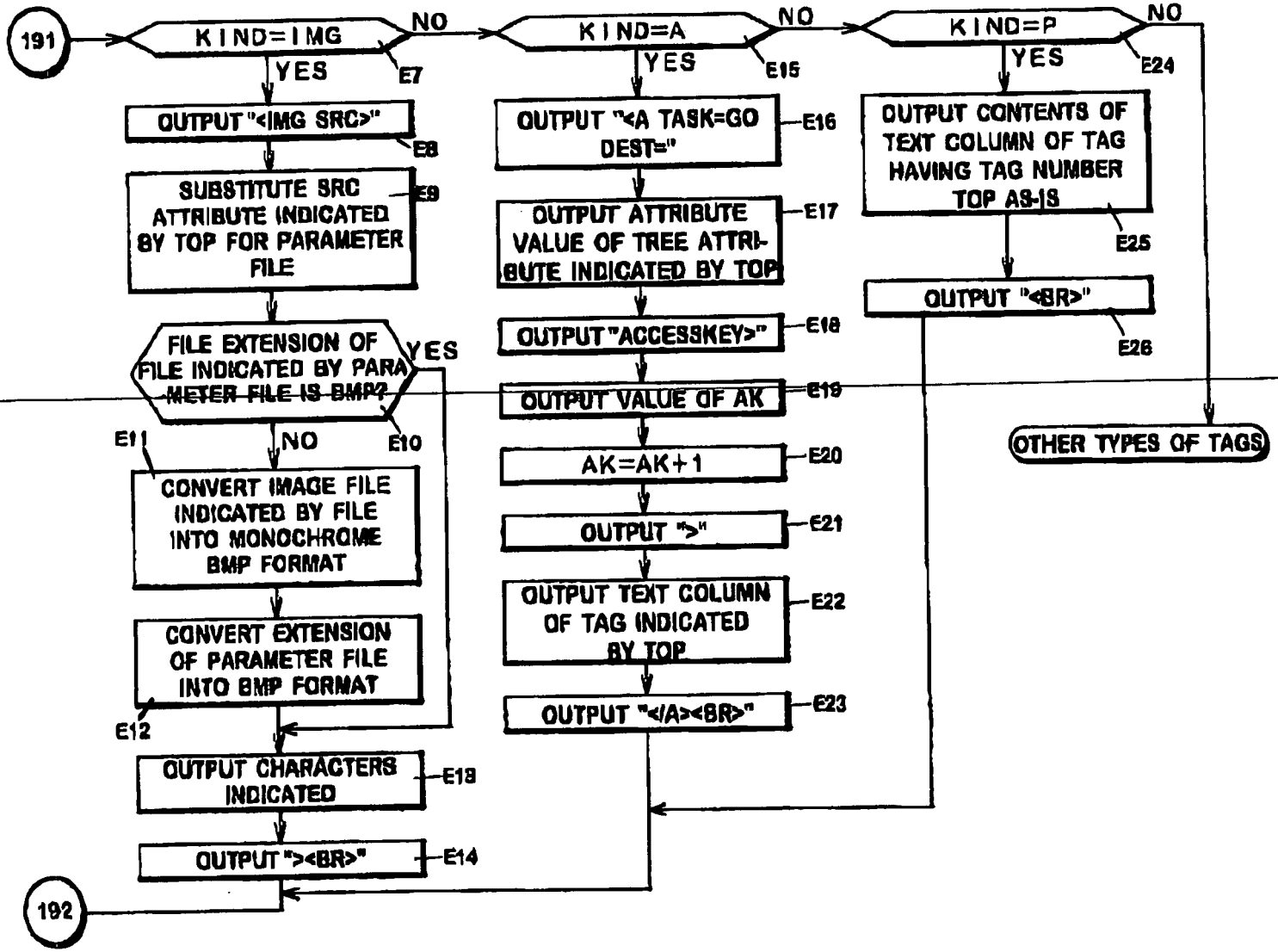
118US

FIG.19A



T-800 P.62/70 F-483
Mar-30-01 08:44am From-
01- 3-30-10:32 ;FURUTANI PATENT OFFICE 118US
SHOW-FITTMAN
88/ 7A

FIG.19B



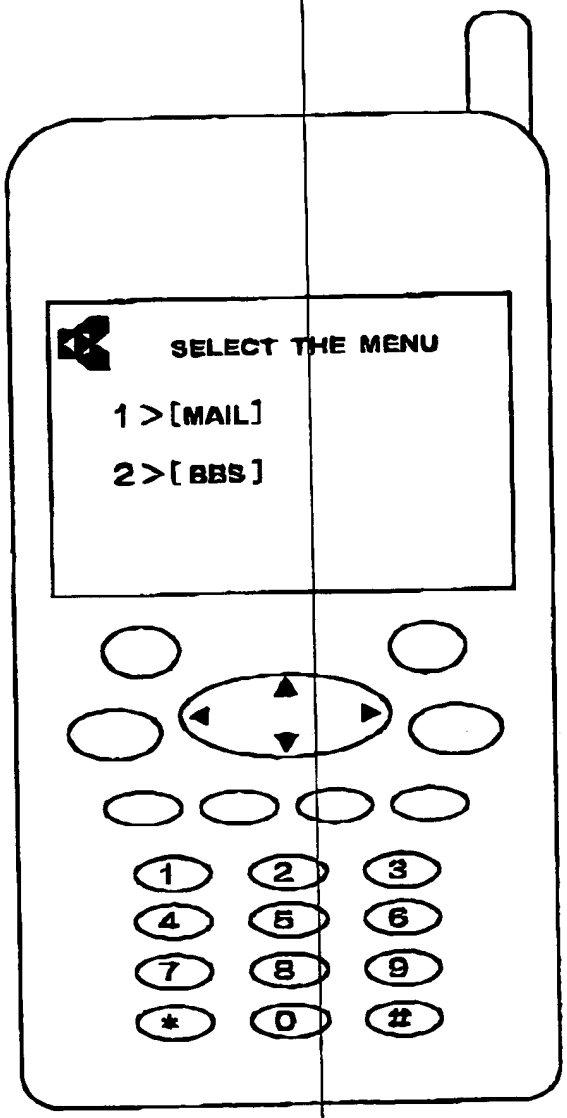
118US

```
<HTML VERSION=3.0>
<DISPLAY>
SELECT THE MENU <BR>
<IMG SRC=ICOM.BMP><BR>
<A TASK=GO DEST=MAIL.KSP ACCESSKEY=1>MAIL </A><BR>
<A TASK=GO DEST=BBS.KSP ACCESSKEY=2>BBS </A><BR>
</DISPLAY>
</HTML>
```

FIG.20

118US

FIG.21



T-800 P.64/70 F-483 Mar-30-01 08:45am From-

118US

FIG.22

Mar-30-01 08:45am From- T-900 P.65/70 F-483

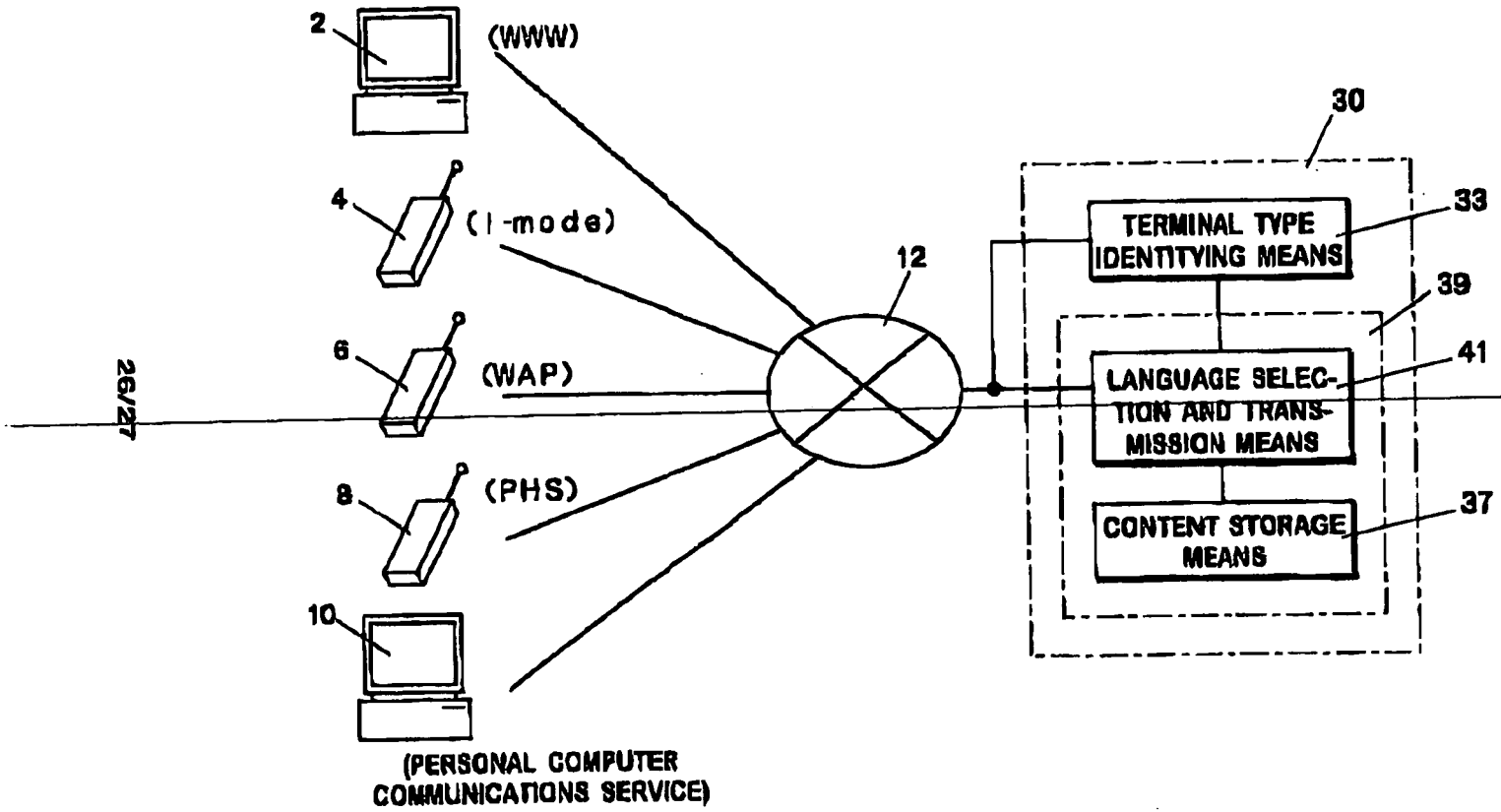
118US

140
CONVERSION PROGRAM
(DISPLAY LANGUAGE → BASIC LANGUAGE)
130
CONVERSION PROGRAM
(BASIC LANGUAGE → DISPLAY LANGUAGE)
12

FIG.23

T-800 P.67/70 F-483
Mar-30-01 08:45am From-
01- 3-30.10:52 ;EUROPEAN PATENT OFFICE
118US
SHOW-01-TMAN
73/ 78

FIG.24



118US

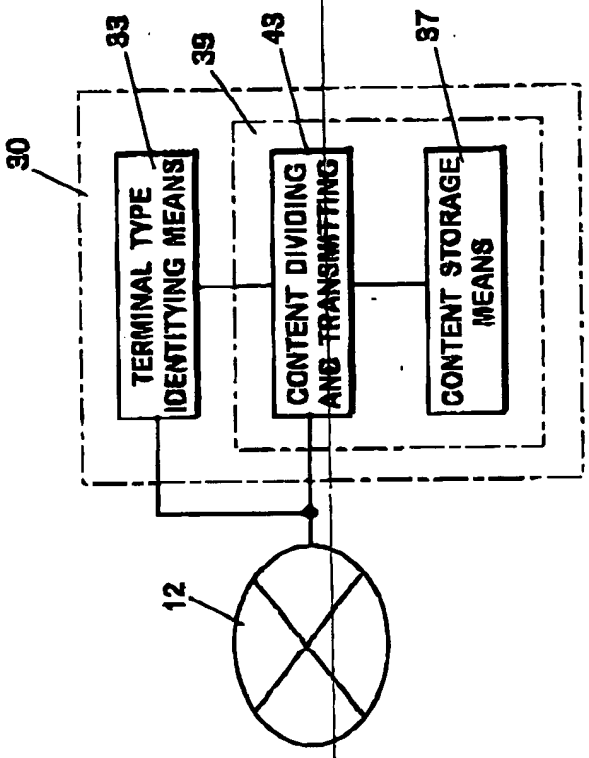


FIG.25

T-800 P.68/70 F-483 Mar-30-01 08:45am From-